B. AMENDMENTS TO THE CLAIMS

1. (original) A method of powering a hybrid electric vehicle with an electric motor and an internal combustion engine comprising:

powering said vehicle by an electric motor up to a first vehicle operational parameter level;

powering said vehicle with an internal combustion engine beyond said first vehicle operational parameter level;

determining a torque level of said motor at said first vehicle operational parameter level;

determining an accelerator pedal travel first position at said first vehicle operational parameter level;

fixing a predefined percentage of a maximum engine torsional output to a predefined accelerator pedal travel second position; and

scaling said accelerator pedal travel by a first predefined functional relationship from said accelerator pedal travel first position to said accelerator pedal travel second position.

2. (original) A method of powering a hybrid electric vehicle as described in claim 1, wherein said first predefined functional relationship is linear.

3. (original) A method of powering a hybrid electric vehicle as described in claim 1, wherein said predefined percentage of maximum engine torsional output is approximately between 95% to 100%.

4. (original) A method of powering a hybrid electric vehicle as described in claim 3, wherein said predefined percentage of maximum engine torsional output is approximately 100%.

5. (original) A method of powering a hybrid electric vehicle as described in claim 1, wherein said predefined accelerator pedal travel second position is approximately between 75% to 85%.

6. (original) A method of operating a hybrid electric vehicle as described in claim 5, wherein said predefined accelerator pedal travel second position is approximately 80%.

7. (original) A method of powering a hybrid electric vehicle as described in claim 1, wherein a maximum motor torque available is determined on an instantaneous basis and wherein when said accelerator pedal is moved beyond said accelerator pedal travel second position said motor additionally supplies boost torque to power said vehicle and wherein said boost torque supplied by said electric motor is scaled by a second predefined functional relationship between said accelerator pedal travel second position and a maximum accelerator travel position.

8. (original) A method as described in claim 7, wherein said second predefined functional relationship is linear.

9. (original) A method of powering a hybrid electric vehicle as described in claim 1, further including powering said vehicle with said electric motor after said vehicle returns from a vehicle operational parameter level above said first level to a vehicle operational parameter level below said first level and determining an accelerator pedal travel third position when said vehicle returns below said first vehicle operational parameter level and determining an instantaneous maximum torque level of said motor and scaling said accelerator pedal from said accelerator pedal travel third position to a fixed third predefined percentage of accelerator pedal travel based on a third predefined percentage of said maximum motor torque available by a third predefined functional relationship.

10. (original) A method as described in claim 9, wherein said third predefined functional relationship is linear.

11. (original) A method as described in claim 9, wherein said third predefined percentage of accelerator pedal travel position is between 0-5%.

12. (original) A method as described in claim 11, wherein said third predefined percentage of accelerator pedal travel is 0%.

13. (original) A method as described in claim 1, wherein said first vehicle operational parameter level is primarily dependent upon a power demand of said vehicle.

14. (original) A method of powering a hybrid electric vehicle as described in claim 1, wherein said electric motor and said internal combustion engine power a common drive axle of said vehicle.

15. (original) A method of powering a hybrid electric vehicle with an electric motor and internal combustion engine comprising:

powering said vehicle by an electric motor up to a first vehicle operational parameter level;

powering said vehicle with an internal combustion engine beyond said first vehicle operational parameter level;

determining a torque level of said motor at said first vehicle operational parameter level;

determining an accelerator pedal travel first position at said first vehicle operational parameter level;

fixing a maximum engine torsional output to a predefined accelerator pedal travel second position which is between 75 to 85% maximum accelerator pedal travel;

linearly scaling said accelerator pedal from said accelerator pedal travel first position to said accelerator pedal travel second position; and

determining a maximum of motor torque available in an instantaneous manner and linearly scaling said accelerator pedal relationship from said accelerator pedal travel second position to a maximum accelerator travel position to add boost torque to said vehicle from said motor.

16. (original) A method of powering a hybrid electric vehicle as described in claim 15, additionally including powering said vehicle with said electric motor when said vehicle returns from a vehicle operational parameter level above said first level, to a vehicle operational parameter level below said first level and determining an accelerator pedal travel third position when said vehicle returns below said first vehicle operational parameter level and determining instantaneous maximum torque level of said motor and scaling said accelerator pedal from said accelerator pedal travel third position to a zero accelerator travel pedal position based on a linear scaling of said maximum motor torque available.

17. (original) A hybrid electric vehicle comprising:

an electric motor for powering said vehicle up to a first vehicle operational parameter level when said vehicle is in a hybrid operational mode;

an internal combustion engine for powering said electric vehicle beyond said first vehicle operational parameter level when said engine is in a hybrid operational mode;

an accelerator pedal for demanding a torque output from said electric motor and/or said internal combustion engine when said vehicle is in a hybrid operational mode, said accelerator pedal having a non-constant travel first position at said first vehicle operational parameter level and a travel second position wherein a first predefined percentage of a maximum of torque output of said internal combustion engine is demanded;

a torque sensor for determining a torque level of said motor at said first vehicle operational parameter level;

an accelerator pedal travel sensor for determining said positions of said accelerator pedal; and

a controller for scaling said accelerator pedal from said accelerator pedal travel first position to said accelerator pedal travel second position by a first predefined functional relationship.

18. (original) A vehicle as described in claim 17, wherein said first predefined functional relationship is linear.

19. (original) A vehicle as described in claim 18, wherein said first predefined percentage of maximum engine torque is approximately between 95% and 100%.

20. (original) A vehicle as described in claim 19, wherein said predefined percentage of maximum engine torque is approximately 100%.

21. (original) A vehicle as described in claim 17, wherein said accelerator pedal travel second position is approximately 75% to 85%.

22. (original) A vehicle as described in claim 21, wherein said accelerator pedal travel second position is approximately 80%.

23. (original) A vehicle as described in claim 17, wherein said torque sensor additionally determines maximum motor torque available on an instantaneous basis and wherein when said accelerator pedal is moved beyond said accelerator pedal travel second position, said motor additionally supplies boost torque to power said vehicle and wherein said boost torque is supplied by a second predefined functional relationship between said accelerator pedal travel second position and a maximum accelerator pedal travel position.

24. (original) A vehicle as described in claim 17, wherein when said vehicle returns from a vehicle operational parameter level above said first vehicle operational parameter level to a vehicle operational parameter level below said first vehicle operational parameter level, said torque sensor determines an instantaneous maximum torque level of said motor, and said accelerator pedal travel sensor determines a third position of said accelerator pedal, and said controller scales said accelerator pedal from said third accelerator pedal travel position to a fixed third predefined percentage of accelerator travel pedal position based on a third predefined percentage of said maximum motor torque available by a third predefined functional relationship.

25. (original) A vehicle as described in claim 24, wherein said third predefined functional relationship is linear.

26. (original) A vehicle as described in claim 24, wherein said third predefined percentage of accelerator pedal travel position is between 0% and 5%.

27. (original) A method as described in claim 26, wherein said third predefined percentage of accelerator pedal travel position is 0%.

28. (original) A vehicle as described in claim 17, wherein said first vehicle operational parameter level is primarily dependent upon a power demand of said vehicle.

29. (original) A vehicle as described in claim 17, wherein said electric motor and said internal combustion engine power a common drive axle of said vehicle.

30. (original) A hybrid electric vehicle comprising:

an electric motor for powering said vehicle up to a first vehicle operational parameter level when said vehicle is in a hybrid operational mode;

an internal combustion engine for powering said electric vehicle beyond said first vehicle operational parameter level when said engine is in a hybrid operational mode;

an accelerator pedal for demanding a torsional output from said electric motor and/or said internal combustion engine when said vehicle is in a hybrid operational mode, said accelerator pedal having a non-fixed travel first position at said first vehicle parameter operational level and a fixed travel second position wherein a maximum of torsional output of said internal combustion engine is demanded and said accelerator pedal having a boost torque range beyond said travel second position wherein said motor supplies torque with said

internal combustion engine and said accelerator pedal having a non-fixed travel third position wherein said vehicle moves below said first operational parameter level;

a torque sensor for determining a torque level of said motor at said accelerator pedal travel first and third positions and a maximum motor torque available at said accelerator pedal travel first, second and third positions;

an accelerator pedal travel sensor for determining said positions of said accelerator pedal; and

a controller for linearly scaling said accelerator pedal internal combustion engine torque output from said accelerator pedal travel first position to said accelerator pedal travel second position and said controller linearly scaling said accelerator pedal motor torsional output from said accelerator pedal second travel position to a maximum accelerator pedal travel position, and said controller linearly scaling said accelerator pedal torsional output of said motor from said accelerator pedal travel third position to a minimum accelerator pedal travel position.

31. (New) A method of powering a hybrid electric vehicle with an electric motor and an internal combustion engine comprising:

powering said vehicle by an electric motor up to a first vehicle operational parameter level;

powering said vehicle with an internal combustion engine beyond said first vehicle operational parameter level;

determining a torque level of said motor at said first vehicle operational parameter level;

determining an accelerator pedal travel first position at said first vehicle operational parameter level;

fixing a predefined percentage of a maximum engine torsional output to a predefined accelerator pedal travel second position; and

scaling said accelerator pedal travel by a first predefined functional relationship from said accelerator pedal travel first position to said accelerator pedal travel second position; and

wherein a maximum motor torque available is determined on an instantaneous basis and wherein when said accelerator pedal is moved beyond said accelerator pedal travel second position said motor additionally supplies boost torque to power said vehicle and wherein said boost torque supplied by said electric motor is scaled by a second predefined

functional relationship between said accelerator pedal travel second position and a maximum accelerator travel position.

32. (New) A method as described in claim 31, wherein said second predefined functional relationship is linear.

33 (New) A method of powering a hybrid electric vehicle as described in claim 31, further including powering said vehicle with said electric motor after said vehicle returns from a vehicle operational parameter level above said first level to a vehicle operational parameter level below said first level and determining an accelerator pedal travel third position when said vehicle returns below said first vehicle operational parameter level and determining an instantaneous maximum torque level of said motor and scaling said accelerator pedal from said accelerator pedal travel third position to a fixed third predefined percentage of accelerator pedal travel based on a third predefined percentage of said maximum motor torque available by a third predefined functional relationship.

34. (New) A method as described in claim 33, wherein said third predefined functional relationship is linear.

35. (New) A method as described in claim 33, wherein said third predefined percentage of accelerator pedal travel position is between 0-5%.

36. (New) A method as described in claim 35, wherein said third predefined percentage of accelerator pedal travel is 0%.